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ABSTRACT

This paper questions whether public concerns about educational quality and slow economic development in Appalachia are being addressed adequately and suggests that the problem of lagging educational performance is rooted in the social and economic environment within which schools operate. Recent high unemployment in south central Kentucky and its relationship to low educational attainment in the region is examined and research is cited which suggests that opinion-shaping leaders and power brokers who enter the region as a socioeconomic elite are very important to progressive, modernizing educational change. Thus, the significance of change to the community, such as a new industrial plant, is linked to whether it brings a significant component of educated, administrative personnel with aspirations congruent with the requirements of a modernized society. These people exert influence by way of example (before parents and children), and through participation in school-support activities, educational administration, and political action. The paper recommends reconsideration of development policies that welcome labor-intensive businesses with large numbers of unskilled jobs. Instead, it is suggested that a new emphasis on education--not on working to establish seniority in low-skill jobs--should be seen as the way out of poverty, and that policies should welcome industries that employ more educated people. It is concluded that there is a need "progressive" firms to the community. Five references, three tables, and one map are included. (TES)

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PROLOGUE

This is not a thoroughly-documented research paper; but it develops some ideas which have grown out of a long series of research studies which we have done. We use data mainly to illustrate our ideas. Obviously, we think that they are important ideas. If they are correct, they would mean that we should be looking at the problem of education in Appalachia from quite a different perspective than the ones usually expressed in the political debates over more state and federal assistance to education, the return to educational fundamentalism and so forth. But we warn our audience that these are not fully-tested ideas. We have developed them because it appears that the traditional ones have not worked to define feasible solutions to the problem of developing the human resources of the region. These ideas will be the subject of some research by a small group of faculty and graduate students in the next few years. But you who live and work in Appalachia or in other regions of similar economic retardation are in a position to provide insight and observe informally the things we hope to examine a bit more systematically in our research. We expose these ideas to your view to encourage you to think about them and react to them. We hope to learn from the thoughts that you may have on these rather different ideas.

BACKGROUND

Thirty-seven years ago Nobel Laureate Theodore W. Schultz was teaching at the University of Chicago. His concerns had shifted from the public policies for commercial agriculture to the problem of poverty in rural regions. In his graduate course on Resource Allocation and Policy, he alluded to the concept of human capital-- looking at the productivity of human beings as something which is produced at a cost to the individual and society. It became an integral part of his theory of economic development which later was the basis for his recognition as a scholar and contributor to the transformation of formerly impoverished, static economies into modern progressive ones. And at that time, he was acutely concerned with the problems of rural poverty in the Appalachian region, the Deep South and the cutover regions of the upper Midwest, not primarily other countries.

No man does this sort of thing single-handedly, but the recent reawakening of interest in education as an instrument of economic development in this and other southern states suggests that his contributions have had long-term impacts. The subject of this conference evinces the awareness that the process we call economic development involves important educational dimensions. An adequately functioning educational process, not just good roads, plant sites, and modern technology embodied in machines, is necessary to economic progress. A recent survey study which we conducted in South Central Kentucky showed that educational level (grades completed) was one of only two major factors explaining the amount of "disemployment," that is, time available for work but not employed (Preissing). A recent lead article in the Lexington Herald-Leader on results of statewide testing for achievement shows that the problem of deficient educational performance in the Appalachian region of Kentucky is far from solved. Achievement is still below more affluent

areas; and there are strong reasons to suspect that it is true of other parts of Appalachia as well.

The central question we want to expose to you is not whether education is important to economic development, but whether the periodic public harangues about the importance of public education and getting back to the basics of traditional academic skills really focus attention on the things that are necessary to get the job done.

The consolidated schools that we have now are better than the one-room schoolhouse in which many earlier generations (including the first author of this paper) got their first eight years of schooling. Furthermore, there is no doubt that teachers are better equipped because they have a better background in developmental and educational psychology and more subject matter preparation. Also, teaching methods have improved and better materials are available. But there is some basis for skepticism about whether adding a few more dollars for gadgets such as computerized learning tools, video-aided teaching and upgrading curricular offerings will solve the problem of lagging areas. Mostly, it seems to us, the problem of lagging educational performance is rooted in the social and economic environment within which schools operate.

The manner in which educational performance is affected by this environment will be discussed a bit later. However, if the general cause of the problem is rooted in this environment, the problem must be reframed -- we must think of the aspects of that environment in which schools operate that impinge on students and the educational process and, equally importantly, how these can be changed. This explains our title - education in the strategy of economic development.

SOME FACTUAL BACKGROUND

As many of you know, in the past two decades the South Central Kentucky counties along I-75, U.S. 27 and US 25-E have had a small industrial revolution. These counties, along with the other coal counties which are still coal-dominated, shared the doubtful distinction of having had severe long-term poverty, low labor force participation, high unemployment, high per capita dependence on public assistance and low educational attainment. The industrially developed counties in that region and the counties contiguous to them and which are well within their commuting zone still do!

An important study by the Economic Research Service, U.S.D.A., (Larson and White) showed that during the period of rapid growth in industrial employment in the nine core counties of this region (Figure 1), as many families who had incomes above the poverty line became impoverished as there were families who "graduated" from poverty status (Larson and White). These previously-impoverished people were mostly untouched by the presumed better employment opportunities, and this occurred despite the apparently improved opportunities for general and vocational education preparation over the past 30 years. Why, when from these and similar areas we have had students who excelled at the University of Kentucky and other institutions and went on to get higher degrees? Juanita Kreps, former Secretary of Health, Education and Welfare, and Dr. C. E. Bishop, President of the University of Arkansas system, both graduates of Berea College, are examples.

More recently we conducted another survey which included these same nine counties and 10 contiguous Kentucky counties. By our calculations, there were approximately 16 percent of the people who were available for work who had never worked full-time a single month over a seven year

period, 1979-86 (Preissing). While some of these people were not available for the entire period, to have even half this proportion of the available labor supply never employed full-time is a major social scandal. Over the period, if one includes the discouraged workers who had given up actually searching for jobs plus those that are officially unemployed, i.e., actively searching for work but without jobs, we have only about two-thirds of the labor supply being used despite almost continual growth in employment in these 19 counties through the recession period (Table 1, taken from Preissing and Skees). Using Census data and a somewhat different method of estimation, Stoll estimated that about 21 percent of the available workers in these same counties who were not employed, but were not actively seeking jobs -- what he called "discouraged workers," or "potential additions" to the official labor force -- in 1970. If we add to this the officially unemployed for the 1979-85 period, we come out with an estimated 33.6 percent "real" unemployed, or utilization of only 66.4 percent of available labor, compared with 69.9% using the Preissing and Skees estimates. Either way you look at it, it is a problem of tragic dimensions.

While we know that the gap in educational attainment has narrowed somewhat between areas such as this and more affluent ones, it still remains true that both in our survey region and in the other parts of Appalachian Kentucky (presumably other Southern Appalachian counties as well) educational attainment and achievement are low -- which is why this conference is being held. Moreover, the principle characteristics that distinguish those who were never employed from those that were employed full-time for a month or more were age and education.

Why, when bus transportation and free lunches are provided for those

unable to pay, and provision is made for all of the other essentials for a decent preparatory education, do we continue to see such lagging educational attainment and achievement? Even access to community colleges, vocational-technical schools and the like is available within moderate commuting ranges in most areas, and at very low cost. (In fact, we would contend that there is not a secondary school in the region in which program content, teacher training or facilities are inferior to the one attended in the 1936-40 period by the first author of this paper. Here, as elsewhere, there has been much improvement. Then what is wrong? What do we need to do to play catch-up in the educational game?

A POSSIBLE EXPLANATION

It is true that cultures and social structures have remarkable capacity for self-perpetuation. And in the coal mining regions and small farm regions of Appalachia, classroom-learned skills had limited bearing on abilities to survive and live in relative comfort until relatively modern times. The folklore, mores, and language traditions reflect this. But this limited bearing on ability to survive and prosper was also true in other regions which are now affluent and educationally progressive. What made the difference?

A rarely-referenced masterpiece study by sociologist H. Dudley Plunkett and economist Mary Jean Bowman analyzes the background, activities and attitudes of teachers, clergymen, lawyers, bankers, physicians, elected officials and a group of younger management people who had participated in a training activity. This group they called "elites" because their positions gave them potential for playing very key roles in the modernization and economic development processes of the Appalachian region. They examined, among other things, their capability to serve as a "cultural bridge" to the more modernized and developed a society at large. The

survey was conducted in the late 1960's, before the industrial boomlet in the South Central counties which we studies had reached full power. (It also did not include a representative sample of the few significant industrial employers and, a bit strangely, no managerial personnel of the mining companies were included.) A major concern was with education, and the effects of these potential opinion-shaping leaders and power brokers on students and the educational system; and this is very relevant to the subjects of concern in this conference.

According to the Plunkett-Bowman survey, many of these so-called elite had significant exposure to education or other experience outside the mountain area. But physicians, who are always small in number, and some classes of clergy were the only groups who were predominantly non-native in origin. This suggests that for most of the potential shapers of the attitudes and aspirations of the young, many of their own expectations and aspirations had been shaped by the same environment in which they then functioned. In effect, they were attitudinally home-grown. And this local environment was a relatively non-modernized one. So it comes as no great surprise that the authors say that (p.65) "Outsiders have emphatic and positive views (toward modernization) while natives, though more numerous, are usually indifferent to modernization." And "The non-native civically active are predominantly non-Baptist clergy..., though there were some other professional men ...from the ranks of physicians, Baptist clergy and lawyers."

AN INTERPRETATION

These data suggest that infusions of civically-active persons with aspirations and perceptions of the "good life", shaped primarily by outside influences, are very important to progressive, modernizing educational change in these areas. Thus, the significance to the community of any

change, such as a new industrial plant, is to an important degree dependent on whether it brings with it a significant component of educated, non-native personnel with aspirations and perceptions which are congruent with the requirements of a modernized society.

How do these outsiders influence the educational processes of communities in which they live and work? What seems apparent is that there are two basic and inter-related avenues. These are:

1. Through influencing, by example, the perceptions of children and their parents about the importance of educational attainment and achievement as a route upward in the social and economic system -- as a route out of poverty. We can call this the demonstration effect -- the living demonstration that a better life is possible and that academic credentials are a means of gaining access to it.

2. Through participation in school support activities, elections of board of education members, informal conferences with teachers and school officials, and by making municipal and county officials and leaders of civic organizations aware of the importance of good schooling to the life of the business community, there is the possibility of improving the quality of instruction. In doing so, they also re-enforce awareness that those who have more affluence are also people that value educational excellence and performance of students.

The real question then becomes "What kinds of industries are likely to bring with them significant numbers of employees with these interests and attitudes?" The labor-intensive operation that depends for its success on a large pool of unskilled, minimum-wage manpower or womanpower and a minimum complement of technical, managerial and skilled workers is not likely to be much of a catalyst to these processes of demonstration and

civic participation. And a small proportion of the manpower in the new manufacturing industries in our survey counties fell into these more highly trained classes (Table 2). The manufacturing industries which have come to the region are rather similar in proportions of labor of the more highly trained categories to similar industries in other areas (Table 2 and Table 3). With the exception of the two categories S.I.C. 35, which is non-electrical machinery, and S.I.C. 37, which is transportation equipment, together comprising only about 13 percent of manufacturing employment, manufacturing employment was mostly in the industries that mainly used the less-trained classes of manpower.

What these data may suggest is that the head count of new jobs which we read about in the newspapers may miss the really important factors that determine long-term modernizing developmental change. Therefore, we may need to look at the tradeoffs between the number of jobs that can be created with our modest resources of revenue bonding, training subsidies and plant site incentives and the quantity and quality of leadership personnel that the company may bring with it. It may suggest that we ought to be just a little bit discriminating in our job-development strategies.

As far as education is concerned, we obviously could use some improvements, but as stated earlier, the larger problem is to get what we have more effectively and intensively utilized; this involves changes in the perceptions of parents and students of the importance of education as a route out of poverty. A director of a small foundation or institute in the coal area of the mountains told me a couple of years ago about his concerns for the attitudes of the children toward education and how these attitudes would affect his own school-age children. As he explained it, the coal mining environment provided mainly direct evidence that the route to a decent house, a good car and the other material things of an affluent

society was to get established seniority in a job in the mines. But this depended little, if any, on schooling. Therefore, most of the children lived for the day when they could legally drop out of school, and academic performance counted for very little in the social pecking orders in the schools.

While we have some evidence that schooling counts for something in terms of employment stability -- the ability to get a job and keep one -- our strong suspicion is that it would make a bigger difference if the industries of the region were ones which required more educated, technical, professional and managerial personnel, initially requiring people recruited from other areas. But more indirectly this could have great significance with respect to educational aspirations, school achievement and numbers of years spent in school. Those people who are educated and who exhibit to the parents and children in the community the possibility that education is an important way to access the upper rungs of the economic and social ladder may be a primary means of breaking (through education) the vicious circle of poverty. If this is true, there may be additional reasons to go beyond the head-count of jobs created and look at the influence of the company and its complement of personnel on the image of the children and their families on the way they can gain access to the "good life". (For example, will the 1000 employee Fruit of the Loom brand underwear plant, announced in the October 6, 1987 Lexington Herald-Leader, merely provide about that number of near minimum wage jobs, or will it favorably affect the aspirations and educational performance of Russell County young people?) These same imported company personnel, if they are relatively numerous, educated, affluent and participative in school-supportive activities, may provide the catalyst for progressive changes in the schools

themselves, and, thereby, a "tone" of attitudes that suggest that education is a route out of poverty. Theirs is a potential dual role in the processes of educational progress.

It is true, of course, that there are not enough IBM's to infuse this kind of influence into every community. However, there are important differences even among firms that have located in rural communities. Significant numbers of firms with progressive attitudes toward community improvements can be found in smaller cities in Kentucky and elsewhere. What it will take to attract them to even the already existing nodes of industrial growth in Appalachia is difficult to say at this point and merits careful study. The cost may be high. Whether it is worth the cost will have to be judged by state and local officials and the voters who elect them. It is they who provide the incentives and who determine which employers are heavily recruited and which are given less encouraging treatment. There are no certain and simple solutions to these problems that have been with us for many decades. But one thing seems now to be certain -- the simple solutions of the past, a combination of upgraded facilities and educational opportunities on the one hand, and increases in numbers of jobs in non-traditional types of employment have not worked. They have not significantly reduced the proportions of families in poverty, nor have they been very effective in reducing the educational gap between Appalachia and the more affluent areas of this country. The achievement scores reported by the Herald-Leader leave Laurel, Whitley, Knox, Pulaski and McCreary counties, the more industrially-developed of the counties we studied, in the lowest achievement class.

While we have provided no prescription and have no definite factual basis for judging the merits of these ideas, we invite you to join with us in trying to determine whether there is a new set of strategies that will

catalyse the educational and developmental processes in the region. Clearly education is among the more important classes of personal and community investments in modernization. Particularly in the development of those all-important human resources of Appalachia will we find the key to the catch-up ballgame that we find ourselves in. The question is mainly whether we can solve the puzzle of how to make educational progress and increased job creation mutually re-enforcing processes.

We invite your thoughts and insights as we begin to probe this much-neglected set of problems. We know that we are breaking away from conventional ways of looking at development and education in Appalachia and other regions of economic backwardness. However, it is apparent that conventional ways of looking at development and education in Appalachia and other regions of economic backwardness have not worked to provide answers to the core problem. So we think that it may be time to try something different -- to take a different look at the problem.

REFERENCES

Larson, Donald K. and Claudia White. Will Employment Growth Benefit All Households? A Case Study in Nine Nonmetro Kentucky Counties. Rural Development Research Report Number 25. Washington, D.C.: United States Department of Agriculture, Economic Research Service, January 1986.

Plunkett, H. Dudley, and Mary Jean Bowman. Elites and Change in the Kentucky Mountains. Lexington: University Press of Kentucky, 1973.

Preissing, John and Jerry Skees. Problems with Unemployment Estimates for Rural Areas. Staff Paper 232. Lexington: University of Kentucky, Department of Agricultural Economics, August 1987.

Preissing, John. Employment Instability for Selected Non-Metropolitan Counties During a Recession: The Influence of Personal Characteristics of Workers. M.S. Thesis. Lexington: University of Kentucky, Department of Agricultural Economics, 1987.

Stoll, John F. Rural Manufacturing Plant Employment Growth in Kentucky and Tennessee: The Effects of Community and Regional Characteristics, 1964-1973. M.S. Thesis. Lexington: University of Kentucky, Department of Agricultural Economics, 1977.

Table 1. Comparative Statistics on Unemployment Estimates for the U.S., Kentucky, and the Study Area

	Unemployment Rates (Percent)				
	U.S. (Official BEA)	Kentucky (Official BEA)	Study Area[a] (Official BEA)	Study Area: (Survey Results) Male and Female	Males Only
1979	5.8	5.6	7.5	38	30
1980	7.1	8.1	10.7	36	30
1981	7.6	8.4	9.6	32	26
1982	9.7	10.6	12.4	30	26
1983	9.6	11.7	14.3	25	22
1984	7.4	9.3	13.4	26	20
1985	7.1	9.5	13.2	24	20

Sources: U.S. Bureau of the Census, 1980, Bureau of Economic Analysis, 1979-1985.

[a] Statistics are weighted averages for Adair, Bell, Casey, Clay, Clinton, Cumberland, Jackson, Knox, Laurel, Leslie, Lincoln, McCreary, Owsley, Perry, Pulaski, Rockcastle, Russell, Wayne, and Whitley Counties, Kentucky for 1980.

Table 2. Percent Employment in Manufacturing Industries by SIC in Occupational Class, United States, June 1983, and Bituminous Coal Mining, Kentucky, 1981.

		Managers & Admin. (%)	Professional, Para-Prof. & Technical (%)	Sales & Related (%)	Clerical & Admin. Support (%)	Agriculture Forestry & Related (%)	Prod., Conversion & Mat. Handling (%)	Service (%)	Proportion* in South Central Kentucky (%)
20	Food and Kindred Products	4.8	3.6	4.2	9.4	1.0	73.7	3.3	9.46
21	Textile Mill Products	3.5	2.7	1.1	8.1	.1	82.7	1.9	6.42
23	Apparel & Textile Products	3.1	1.5	1.7	8.6	___	83.7	1.2	31.46
24	Lumber and Wood Products	4.7	2.1	1.9	6.6	10.3	72.8	1.7	9.25
25	Furniture and Fixtures	4.5	2.5	2.8	9.0	[illegible]	79.9	1.4	7.16
27	Printing and Publications	7.1	11.5	9.6	23.5	[illegible]	46.8	1.5	3.19
28	Chemicals and Allied Products	8.2	19.2	3.6	14.6	.2	51.9	2.2	2.87
30	Rubber and Plastics	5.7	5.0	2.0	8.8	[illegible]	76.9	1.5	1.88
32	Stone, Clay and Glass	5.9	4.7	2.6	9.4	[illegible]	76.0	1.3	4.83
33	Primary Metals	4.4	6.6	1.5	9.0	[illegible]	76.5	2.0	2.40
34	Fabricated Metal Products	6.0	6.8	2.6	9.3	[illegible]	73.8	1.5	1.82
35	Machinery except Electrical	7.4	16.8	3.1	14.2	[illegible]	56.9	1.6	11.78
36	Electrical and Electronic Mach.	6.1	19.9	1.7	12.1	[illegible]	58.7	1.5	2.10
37	Transportation Equipment	5.4	20.2	.6	10.2	[illegible]	51.0	1.5	1.17
12	Bituminous and Lig. Coal Mining **	6.4	3.7	.1	4.6	[illegible]	83.8	2.0	____

Sources: 1. U.S. Department of Labor. Occupational Employment in Manufacturing Industries. Bulletin 2248. Washington, D.C.: Bureau of Labor Statistics, 1985.

2. Kentucky Cabinet for Human Resources. Kentucky Occupational Profiles = Construction and Mining, 1981 Frankfort: Research and Statistics Branch, 1985.

* Presents the proportions of employees within the manufacturing sector, i.e., 9.46% of the employment in the manufacturing sector is in Food and Kindred Products in South Central Kentucky.

** Not considered in the manufacturing sector.

Table 3. Illustrative Proportions of Employees by Occupational Class in Selected Categories of Manufacturing Plants in South Central Kentucky Counties 1986

	Total Plants	Plants Reporting*	Managers & Administrators (Percent)	Professional & Technical (Percent)	Secretarial & Clerical (Percent)	Skilled, Semi-skilled, Operators & Unskilled (Percent)
20	9	4	9.1	10.6	7.0	73.3
23	12	12	2.7	1.5	2.5	93.3
24	9	5	8.1	3.8	3.9	84.2
32	9	4	5.2	7.7	4.1	83.0
35	7	6	15.3	8.3	10.3	66.1

*Firms not reporting had insufficient records or elected not to supply data.

Source: Survey by University of Kentucky under cooperative agreement with Economic Research Service, U.S. Department of Agriculture.

Figure 1. Survey Areas of University of Kentucky and Economic Research Service (U.S.D.A.) Studies

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